

### Abstract of the Disclosure

Methods for compressing and reconstructing an animation path using linear approximation, apparatuses for performing the methods, and data formats therefor are provided. The apparatus for compressing an animation path, has an interpolator analysis unit for extracting a predetermined number of break points from an animation path and outputting keys and key values corresponding to the break points; a key coder for coding keys output from the interpolator analysis unit; a key value coder for coding key values output from the interpolator analysis unit; and an entropy encoder for entropy encoding the keys and key values which are coded in the key coder and key value coder, respectively, and outputting encoded bit streams. According to the methods, by analyzing break points, a simplified encoded bit stream having a minimum number of break points is obtained.